

# Taxation in a Digitizing World: Solutions for Corporate Income Tax and Value Added Tax

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## 1 Introduction

**61** Although we live in a digital age in which everything and everyone is ‘online connected’, countries’ tax systems are still based on an economic reality of decades ago – in the case of VAT – and sometimes even – in the case of corporate taxation – a century ago. This is creating tension, specifically in the case of the turnover and profits generated by internet-related activities, which are very difficult, if not impossible, to pin down for tax purposes. And this tension is being exacerbated by the ‘sharing economy’. Questions arising, therefore, include whether our tax systems are still ‘fit for purpose’? How much is being done to effectively address the emerging tax challenges of digitalization? Will this momentum prompt us to change our tax systems? Is the time ripe for fundamental reform? Will it ever be?

These were some of the questions raised by the chairman, Maarten de Wilde,<sup>1</sup> at the start of the afternoon seminar. He noted that BEPS Action 1 sought to address the digital challenges facing the tax world. After the final reports of the Base Erosion and Profit Shifting (BEPS) project were presented, however, it became clear that seeking solutions *within* the current tax systems took insufficient account of digitalization and the specific challenges that this represents for tax systems. De Wilde put it to the audience, therefore, that we would perhaps have to seek solutions *outside* the current tax systems. Indeed, the OECD has now launched a study aimed at identifying alternative ways to tax sales and profits from internet-related activities.<sup>2</sup> The EU is also taking action, as evidenced by the joint position statement issued by France, Germany, Italy and Spain during the Digital Summit held in July this year in Tallinn and that urged the European Commission to tax the turnover rather than the profits of digital multinationals operating in the EU market.

The VAT system, too, is facing challenges from the increasingly digital nature of the economy. A VAT system based on the destination principle is sometimes seen as offering a solution.<sup>3</sup> Reference was made in this respect to the various initiatives being undertaken with regard to cross-border *e-commerce*, as well as to other initiatives aimed at equipping the tax system to deal with the digital economy.<sup>4</sup>

1. Maarten de Wilde is the programme coordinator of the EFS Post-Master in International and European Tax Law at the Erasmus University Rotterdam, and an associate professor at the Erasmus School of Law, as well as working for Loyens & Loeff N.V.
2. See also the OECD’s Request for input on work regarding the tax challenges of the digitalized economy (22 Sept. 2017).
3. Since 1 Jan. 2015, and in contrast to the principal rule applying to B2C services, the place of supply for digital (i.e. telecommunication, broadcasting and electronic) B2C services has been the destination state (i.e. where the consumer is resident).
4. See e.g. *Action Plan on VAT: Towards a Single EU VAT Area – Time to Decide* (Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee), Brussels 7 Apr. 2016, COM(2016) 148 final; *VAT Digital Single Market Package* (European Commission), Brussels, 1 Dec. 2016, and *European Commission Proposes Far-Reaching Reform of the EU VAT System*, Brussels, 4 Oct. 2017.

The above opening words marked the start of the European Fiscal Studies seminar held at the Erasmus University Rotterdam and which was attended by close to 200 participants from a wide range of countries.<sup>5</sup>

## 2 Taxation and digitization: Issues and insights

The first speaker of the afternoon was Rita de la Feria,<sup>6</sup> who started by placing the digital economy in a broader perspective. She then discussed the challenges that the digital economy, and the process of transforming to this economy, represented for corporation and indirect tax **62** systems, as well as possible ways of addressing these challenges.

De la Feria described the digital economy as a collective name for a range of different activities, all with their own specific characteristics and including online shopping, the ‘sharing economy’ (Uber, Airbnb), the way in which new economic structures are being created and the dominance of intangibles. The combined effect of these separate aspects is having an impact on the very foundations of our international tax system, where states’ right to impose tax is based on two fundamental elements: ‘substantive jurisdiction’ and ‘enforcement jurisdiction’. The first of these elements relates to the *legitimacy* of taxes imposed, while the second relates to a state’s *ability* to collect taxes imposed. Together, these elements form the basis for determining in a relatively straightforward way – at least in a traditional, physical and territorial economy – which state is entitled to impose tax. The situation is very different, however, in a globalized and digitalized economy, where it is almost impossible to determine which state has both substantive and enforcement jurisdiction.<sup>7</sup> From this, De la Feria concluded that today’s new reality is seriously undermining the very foundations of our current tax system.

The reactions to these developments have taken two forms. In the case of indirect taxes – which represent a major source of revenue for states around the world – governments and tax practitioners have concluded that the existing rules have become outdated and that changes are needed to protect these tax revenues (‘internal pressure’). In the corporation tax world, by contrast, reforms have been initiated not by governments and practitioners, but instead in response to pressure from society, non-governmental organizations and lobby groups (‘external pressure’). De la Feria suggested that it was this difference – internal or external pressure – that explained the differing outcomes of the reforms in indirect taxes and

5. The presentations are available on, [http://www.europesefiscalestudies.nl/?page\\_id=1019](http://www.europesefiscalestudies.nl/?page_id=1019).

6. Rita de la Feria is Professor of Tax Law at the University of Leeds, as well as an International Research Fellow at Oxford University’s Centre for Business Taxation and a Visiting Professor at the University of Lisbon.

7. De la Feria referred to the worldwide production chain of a pot of Nutella®, which the OECD used as an example in its *Mapping Global Value Chains* report; see OECD Report *Mapping Global Value Chains*, TAD/TC/WP/RD(2012)9, figure 6.

those in corporation tax. Whereas internal pressure in the field of indirect taxes has resulted in a bold and innovative approach, as seen, for example, in the OECD's acceptance of the influence of 'soft law' in the International VAT/GST Guidelines and the EU's acceptance of taxation based on the destination principle,<sup>8</sup> the corporation tax measures adopted have been conservative and focused primarily on maintaining the status quo, with recent initiatives in this field, including BEPS, resulting in a huge increase in both national and international anti-avoidance measures. By definition, these address merely the symptoms and not the causes of tax avoidance, and are therefore regarded by De la Feria as doomed to fail, given that wherever the underlying causes persist, new symptoms will continue to appear.

De la Feria consequently presented two possible alternatives, the first of which was *formulary apportionment*.<sup>9</sup> A significant disadvantage of such a system, however, is that it would be effective only in the event of global implementation. De la Feria therefore preferred the second alternative – taxation based on the destination principle – which states can introduce unilaterally.<sup>10</sup> By aligning with the least mobile element in the production chain, the consumer, this principle avoids disrupting the economy, insofar as possible.<sup>11</sup>

De la Feria then addressed the question of whether the destination state would have both substantive and enforcement jurisdiction; in other words, whether taxation based on the destination principle would be both legitimate and enforceable.<sup>12</sup> She believed such taxation to be legitimate, both at a national and an international<sup>13</sup> level, while rejecting outright the complaint that it could have an adverse impact on developing countries. As she explained, many developing countries import more than they export, while, at least as far as services are concerned,

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8. See OECD (2017), *International VAT/GST Guidelines*, OECD Publishing, Paris, and the Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the follow-up to the Action Plan on VAT Towards a single EU VAT area – Time to act, COM (2017) 566 final.
  9. This system is used in the United States and Mexico and was recently proposed again in the EU (CCCTB). With regard to the CCCTB proposals, see M. F. de Wilde, *The CCCTB Relaunch: A Critical Assessment and Some Suggestions for Modification* (1 Mar. 2017), available via SSRN: <https://ssrn.com/abstract=3040739>.
  10. J. Becker & M. Jung, *Unilateral Introduction of Destination-Based Corporate Income Taxation*, [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=PET15&paper\\_id=377](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=PET15&paper_id=377).
  11. In this respect, see Meade Committee, *The Structure and Reform of Direct Taxation* (London: Allen and Unwin 1978); Howell H. Zee, *Reforming the Corporate Income Tax: The Case for a Hybrid Cash-Flow Tax*, 155 *De Economist* 417 (2007); Alan J. Auerbach et al., *Taxing Corporate Income*, Oxford University Centre for Business Taxation Working Paper 07/05, Paper prepared for the Mirrlees Review, *Reforming the Tax System for the 21st Century* (2008), and Alan J. Auerbach et al., *Destination-Based Cash Flow Taxation*, Oxford University Centre for Business Taxation Working Paper 17/01.
  12. See also M. Devereux & R. de la Feria, *Designing and Implementing a Destination-Based Corporate Tax*, Oxford University Centre for Business Taxation Working Paper 14/07.
  13. De la Feria referred to 'inter-nation equity' and asked whether it was legitimate for states to impose tax on sales if not every state has the same purchasing power.

many of these countries already base their taxation on the destination principle.<sup>14</sup> She also argued that, in the present system, the nature of developing countries' economies, combined with tax competition between countries, meant that these countries currently had very little scope for negotiating, while this situation would change if taxation were to be based on sales' destination. In her view, such a system would also be enforceable, even though the experience of efforts to combat fraud in the field of VAT suggests some room for improvement. She noted that attention in this area has so far focused largely on the cost of lost revenues,<sup>63</sup> while fraud also entails other costs, including the costs of distorted competition, taxpayer inequity and the funding of organized crime. This one-sided approach is reflected in the policy of recent years, with various states having adopted voluntary disclosure or amnesty arrangements, tax settlements, formalism and third-party liability in their attempts to recoup lost revenues. According to De la Feria, we are now seeing a shift from fraud control to fraud management, with all the risks of selective enforcement that this entails.

In De la Feria's view, the international tax system is certainly not equipped for the digital economy. This applies particularly in the case of corporation tax, but also, albeit to a lesser extent, in the case of indirect taxes. If we are to prepare ourselves for the digital economy, she stated in response to a question from the audience, states need to be open and honest about tax avoidance, while also accepting that the changes in the economy are fundamental and cannot simply be absorbed by anti-avoidance measures, and that enforcement should no longer focus exclusively on ways to compensate for lost tax revenues. She also made it clear that although she does not regard destination-based taxation as any more or less legitimate than origin-based taxation or Common Consolidated Corporate Tax Base (CCCTB), it would put a stop to tax competition and avoidance. Her view on De Wilde's suggestion to introduce a hybrid form of taxation like in Canada, where it is based for 50% on sales and 50% on labour, was that this would represent a credible alternative. She noted, however, that such a hybrid would be more disadvantageous for developing countries, given that it would do nothing to combat tax competition.

De la Feria closed by commenting that it was impossible to ring-fence the digital economy because the entire economy was now becoming digitalized. She consequently argued that we should be seeking to adapt the current system to reflect the new reality rather than introducing a new 'Google tax' and essentially maintaining the status quo.

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14. With regard to 'source tax', see M. F. de Wilde, *Tax Jurisdiction in a Digitalizing Economy; Why 'Online Profits' Are So Hard to Pin Down*, (12) *Intertax* 43 (2015).

### 3 Taxation of the digital economy: Suggestions for reform

Nicolas Colin,<sup>15</sup> the second speaker at the seminar, previously worked for the French tax authorities, where he co-authored the Collin & Colin report.<sup>16</sup> This report addressed the tax challenges presented by a digitalized economy and set out a series of recommendations for the French government. In his seminar contribution Colin outlined his vision of how digitalization has influenced the economy and the tax challenges he sees in this respect, based both on his past experience and on the knowledge and experience he has gained and continues to gain in his current position.

The above report's primary focus was on the tax treatment of tech companies such as Google, Facebook and Amazon, with the underlying question being how can these businesses effectively be taxed without our tax system changing in a way that would obstruct traditional companies? No account, however, was taken of Carlota Perez's model, which essentially divides the past three centuries into a series of five successive socio-economic revolutions,<sup>17</sup> each characterized by a two-phase technological lifecycle. In each case, the first of these phases sees new ideas, new inventions and major capital investments. The fact, however, that this phase takes place in a non-regulated environment creates a 'bubble', and it is the subsequent bursting of this 'bubble' that marks the transition to the second phase. This second phase is then dominated by implementation and by the realization that the first phase of the revolution represented a turning point and will structurally change the existing socioeconomic reality. The technological developments then start creating value. And that, according to Colin, is when governments need to establish new institutions to ensure that the new socio-economic reality is subject to sustainable and inclusive regulation. In the case of the latest of these revolutions – the digitalization of the economy – the bursting of the dot-com bubble in 2001 marked the transition to the second phase, while the end of the financial crisis can be seen as the effective start of the second phase.

Colin explained that tax systems require specific attention in this second phase because they are still based on an outdated socio-economic reality. One of the examples he gave in this respect was the choice made in the past to tax enterprises rather than individuals. Given that the former have to maintain proper administrative records and to report their transactions, this has traditionally been

15. N. Colin is Professor of Business Strategy at Université Paris-Dauphine and, as Professor of Policy, holds the Digital, Policy & Organizations Chair at Sciences Po.

16. P. Collin & N. Colin, *Task Force on Taxation of the Digital Economy* 1 et seq. (2013).

17. The five socio-economic revolutions are (1) the industrial revolution, (2) the age of steam and railways, (3) the age of steel, electricity and heavy industry, (4) the age of oil, automobiles and mass production, and lastly (5) the age of information and telecommunications ('digital revolution'). C. Perez, *Technical Revolutions and Financial Capital – The Dynamics of Bubbles and Golden Ages* (Cheltenham: Edward Elgar Publishing Ltd 2002).

a reasonably easy reference point for taxation. And certainly easier than levying tax on natural persons, given that the information asymmetry that previously existed made it more difficult to determine individuals' income and assets. These days, however, huge amounts of information are available and easy to obtain. As a result, the argument that was used to justify introducing taxes on enterprise profits during the fourth technological revolution – the age of oil, automobiles and mass production – is no longer relevant. And that then raises the question of whether it would be <sup>64</sup> more effective simply to tax the income and capital of natural persons rather than the turnover and profits of enterprises.

Although this approach can certainly be seen as attractive in certain respects, the reality is that society still tends to want to tax enterprises. When discussing reforms to the tax system, however, it is essential, according to Colin, to address this aspect, subject to certain conditions. The moral argument that enterprises should pay their 'fair share' of tax, and that has even prompted some enterprises to respond to pressure from public opinion by deciding 'voluntarily' to pay tax – as in the case of Starbucks in the United Kingdom – is not an argument that will produce a structural solution. In Colin's view, 'quick fix' (and dangerous) solutions, such as the above proposal by France, Germany, Italy and Spain to tax turnover, are the wrong way forward as they will trigger a counter-reaction by non-EU countries. It would be better, in his view, to redefine the concept of the permanent establishment. And, to his satisfaction, this solution was also raised during the previously mentioned Digital Summit held in Tallinn under Estonia's presidency of the EU.

Colin then referred to the 'elephant in the room', being the problem of recognizing and acknowledging the extent of the challenges posed by the digital economy and that need to be dealt with if we are to effectively redefine the concept of the permanent establishment. He referred firstly to the fact that enterprise value is now no longer found *within* a business, but is instead driven by *external* factors. Before the digital revolution, an enterprise's value was determined by its assets, its workforce and its intangibles, whereas value is now found in the users associated with the enterprise. They are the ones creating value. And these users are no longer at the *end* of the value chain, but are instead active and shifting to the *middle* of the chain. Colin gave the example of Facebook, which derives the strength and value of its business from its numbers of users. Any redefining of the permanent establishment will have to take this into account and this, according to Colin, means levying tax in the countries where these users are active.

If we decide, however, to redefine the concept of the permanent establishment, we will first have to overcome certain technical, procedural and political obstacles. As examples of technical obstacles, Colin referred to the difficulties associated with valuing consumers' use of digital platforms such as Facebook, while such valuations play an essential role in the allocation of profits. Meanwhile the procedural and political obstacles reflected the fact that change will take shape only after reforms

have been adopted by existing international organizations such as the OECD or the EU, where reaching agreement is often anything but straightforward. As examples of such difficulties he mentioned the requirement for unanimity among EU Member States, and the important and often decisive vote of the US Congress in the case of OECD decisions. To increase the likelihood of Congress supporting such reforms, Colin proposed bargaining with US tech companies in the EU by offering to ease the regulatory burden and obstacles they face in Europe (witness the legal action taken against Airbnb and Uber). In return for less stringent regulation, which would enable these companies to increase their European market share, they would then be expected to allocate more profits to and accordingly pay more tax in the EU. In effect, a facilitating approach to regulation would be 'sold' or negotiated in return for a greater share of tax payments. Ultimately, in Colin's view, these companies would be willing to lobby Congress to consent to tax reforms. He viewed such negotiations as a new institutional form that would reflect the new paradigm associated with the fifth socio-economic revolution.

In the discussion following Colin's presentation, some in the audience expressed concerns about the informal 'negotiated solution' presented. Not everyone could accept this 'single entity approach', as one participant referred to it, and questions were also raised as to how this would align with the prohibition on state aid, as well as prohibitions imposed by the World Trade Organization, for example. Another participant criticized the idea on the grounds that amending regulations in return for higher payments of tax would encourage 'free riders', with competitors of, say, Uber being able to benefit from regulatory easing without having to pay higher levels of tax in return. Colin countered this view by stating that a characteristic feature of the digitalized economy was businesses with monopoly positions. As each sector in the digitalized world was now dominated by a single tech company, there was very little opportunity for 'free riders', while the dominant players would not be disadvantaged to any meaningful extent by the few free-riding competitors able to benefit from the reduced regulatory burden. Whatever a dominant player had to pay in tax, Colin claimed, it would earn it back in the form of an improved reputation and the economies of scale it would be able to achieve.

#### 4 VAT in a digitizing economy: Disruption/ exponential growth, automation and impact on taxation

Rogier Vanhorick,<sup>18</sup> the seminar's third and final speaker, looked at the challenges facing VAT in the digitalized economy and used a video clip to show how indirect taxes are becoming increasingly significant across the globe. More and more

18. Rogier Vanhorick is a partner and global digital leader at Deloitte.

jurisdictions are now levying these taxes, which account for an ever-increasing share of total tax revenues. The reasons for this are the low perception costs and the fact that indirect taxes can be imposed relatively easily ('stealth taxes'); consumers <sup>65</sup> barely complain when new indirect taxes are introduced, while rises in existing indirect taxes attract little if any protest. Indirect taxes are often 'invisible' and seem to be able to adapt to a new socio-economic reality in chameleon-like fashion, with a new indirect tax simply being introduced under, say, the banner of a 'Google tax'.

Vanhorick urged the audience to recognize that although we still tend to think linear, the new socioeconomic reality is being shaped by exponential growth, as explained by Moore's law. This law is based on Moore's observation that technological progress results in the number of transistors in an integrated circuit doubling approximately every two years. Vanhorick gave a few examples to illustrate how the effects described in this law can be seen in the disruption that many technological developments are causing to business models and business growth patterns alike.<sup>19</sup>

He went on to describe various trends in the digitizing economy and the concept of exponential growth. Firstly we are seeing a shift from a scarcity market to a market of abundance, while, secondly, the global economy, which was previously focused on the trading of goods, is now transforming into a global economy based around services. The VAT Directive, which was conceived of during what Colin referred to as the fourth socio-economic revolution, is based on a global economy focused on the trading of goods. This is why concepts and taxable transactions in the Directive, for example, no longer reflect today's socio-economic reality. To illustrate this shift Vanhorick referred to the Dutch electricity company Essent, which now offers a *service flexibility* contract that provides insight into a household's energy use and outlines ways to reduce this, thus effectively turning the electricity supplied under the contract into a commodity of only secondary importance.

Once growth becomes exponential, governments find it difficult to respond effectively and to adapt legislation and regulations accordingly. Their response is often to reject the new technologies, as seen in the attempts by Turkey and China to ban the use of social media. Other examples include the regulations aimed at curbing the activities of businesses such as Airbnb and Uber. Vanhorick also mentioned the discussions surrounding 'fair value'. Multinationals always claim to have paid enough tax, while governments claim the opposite. The upshot of this is the Spanish Inquisition-like scenes witnessed, for example, when Starbucks was 'invited' by a UK parliamentary committee to answer questions about the group's tax practices. Vanhorick saw the subjective arguments raised during such questioning as proof of the underlying problem of regulations being out of step with today's socio-economic reality.

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19. Businesses are becoming billion-dollar companies in record time: Google took eight years, while Facebook managed it in five years and Groupon in only two years.

At the same time as public discussions of tax avoidance have been bursting out across the world, corporation tax rates have become entangled in a 'race to the bottom', driven by government fears that businesses will otherwise move their activities and head offices elsewhere. Meanwhile, we have also seen governments around the world raising their VAT rates in an attempt to protect their tax revenues. Indeed, the primary driving force for BEPS was politicians' perceived need to justify why, on the one hand, consumers were having to pay higher VAT and income tax rates, while, on the other hand, the 'race to the bottom', and the opportunity to exploit *loopholes* in international tax legislation so as to allocate profits efficiently, meant businesses were paying less and less tax. Although BEPS had not fully dealt with all the tax challenges created by digitalization, BEPS Action 1 at least addressed most of the digital developments.

As Vanhorick explained earlier in his presentation, business models are being seriously disrupted by technological developments. While the other speakers believed it would be relatively easy to adapt VAT to accommodate these developments, Vanhorick advised caution. The traditional transaction chain is disappearing in response, for example, to the invention of 3D printers. And this means that the basis for charging VAT is also disappearing. This creates new challenges. Who, for example, should be liable for VAT? Does someone become an enterprise for VAT purposes if he sells his neighbour a pair of shoes that he produced on his own 3D printer?<sup>20</sup> Is any VAT chargeable in peer-to-peer structures involving no identifiable remuneration? And, if so, how should it be charged? Another question arising concerns the value on which any VAT should be based. Looking ahead, Vanhorick could see VAT revenues decreasing over time and questioned whether the destination principle represented a solution. As he also saw a multitude of enforcement problems on the horizon, he queried whether the VAT system in its current form was properly equipped to deal with the new developments in technology.

In his view, therefore, it is time to start looking for different solutions. Tanzania, for example, has decided to tax mobile phone users on their call minutes. Another possible basis for tax would be payments. Lastly he said that technology also had implications for tax professionals,<sup>21</sup> with much of their work predicted to be taken over by robots. And this applied not only to those involved in preparing tax returns, given that *artificial intelligence* would also affect those working in **66** advisory roles. The key to survival, therefore, is not to oppose automation and robotization, but instead to adapt to our new role in tax advice.

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20. In this context, *see* the case law showing the threshold for constituting an economic activity, and thus being able to deduct input VAT, to be relatively low. CJ EU 20 June 2013, C-219/12 (Thomas Fuchs), ECLI:EU:C:2013:413.

21. C. B. Frey & M. A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerisation?* (Oxford: Oxford Martin School).

## 5 Final remarks and observations

In summarizing, De Wilde stated that the seminar had shown that, in this new reality, our current tax system has become exponentially outdated and in need of reform. To get this process started, we now need to ‘disrupt’ ourselves out of the status quo so as to design a tax system fit for this new reality. He referred to differences of opinion on the way forward, with De la Feria believing that the system to be adopted should be based on the destination principle, while Vanhorick foresaw too many problems in such an approach and consequently proposed aligning taxes with payments (‘Follow the money’).

De la Feria replied that although she supported Vanhorick’s narrative, her conclusion was different. In her view, the problem identified by Vanhorick – the difficulty in determining the destination – related not so much to the destination principle itself, but was instead a proxy problem concerning the indicators to be used for determining the destination. Ultimately, she believed, the ‘follow the money’ approach was also a matter of determining the location of the consumer, with the effect that taxation would then still be based on the destination principle. She added that rather than being substantive in nature, many of the problems identified by Vanhorick related more to the issue of enforcement, where she also acknowledged various potentially problematical issues. Vanhorick disputed this point, claiming that some of the problems that would arise were indeed of a substantive nature, including problems associated with the ‘sharing economy’. How, for instance, should we determine the value of performance in the absence of monetary consideration? And is it indeed even always clear what the *quid pro quo* is? Vanhorick also asked about the idea of our paying tax to the state in return for protection of our private assets. Would this still apply if there were no assets left for a government to protect? Food for thought!

Following these final discussions De Wilde rounded off the seminar and thanked the speakers and the organization for facilitating it.